

VI. Attachments

1. Environmental Criteria & Vendor Certification Form

MANDATORY PRODUCT ATTRIBUTES

The following product attributes are mandatory for Environmentally Responsible cleaning products purchased by the State of Washington. Failure of a product to meet any of the criteria listed in questions 1-8 below will lead to the automatic rejection of the product. Also, failure to submit acceptable information to verify meeting these criteria will lead to the automatic rejection of that product. All answers should pertain to the product in it's diluted or ready to use state.

1. Certification of Product Attributes

Bidders must submit documentation from an independent laboratory that provides proof that all ingredients both active & inert adhere to the criteria specified in the mandatory product attributes section of the Environmental Criteria & Vendor Certification Form (attachment VI). Failure to provide/submit this information with your bid will be grounds for bid rejection. This information should be attached to the Price/Product Information sheet of which the test information applies.

- *If information is on a Material Safety Data Sheet, it is acceptable*
- *A signed letter from the lab that did the testing certifying that the product meets the eight mandatory product attributes.*
- *A list potential testing laboratories is available. They need to be able to do bioassays.*

2. Persistent, Bioaccumulative And Toxic Chemicals

The State of Washington believes that these chemicals are no longer required in most cleaning products and wishes to protect the health of its workers by minimizing exposure to such chemicals.

- *No ingredient shall be on EPA's Superfund Amendments and Re-authorization Act (SARA) Title III, Section 313 list of toxic release inventory chemicals, AND*
- *A list of the TRI chemicals can be found at:
<http://www.epa.gov/opptintr/tri/chemls2.pdf>*
- *A list of the 27 chemicals that are on Ecology's PBT list is available*
- *No product shall contain alkylphenol ethoxylates (APE's) above trace amounts. The State of Washington recognizes that the break down products of APE's bioaccumulate in the environment. Further, there is potential danger to wildlife and humans when hormonal mimics like APE's are released to the waters of the state, and APE's are not consistent with the need for ready biodegradability.*

A non-exhaustive list of APE's is available.

3. Aquatic Toxicity

The State of Washington wishes to protect its valued aquatic wildlife, such as salmon, which help support the local economy and quality of life for residents and, therefore, is concerned

about the aquatic toxicity of chemicals used in State operations. No product shall be toxic to aquatic life, as measured by test methods found in 40CFR Part 797, Subpart B, and as determined by meeting the following three criteria for acute (Daphnia, fish), acute (algae), and chronic (Daphne) effects:

Acute	EC20 Daphnia (48 hr.)	> 1,000 mg/L
	EC20 fish (96 hr.)	> 1,000 mg/L
Acute	EC20 algae (96 hr.)	> 1,000 mg/L
Chronic	EC20 Daphnia (21-day or 14-day min.)	> 1,000 mg/L

Testing is not required for any ingredient for which sufficient information exists concerning its aquatic toxicity, either in peer-reviewed literature or databases or based on tests conducted according to standard procedures. Otherwise, include a certification letter from an independent lab listing values and test used.

[Search for the citation under the Code of Federal Regulations \(CFR 40, Part 797, Subpart B\)](http://www.access.gpo.gov/nara/cfr/cfr-retrieve.html#page1)
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4. Carcinogens, Mutagens And Teratogens

No ingredient can be classified as a known or probable carcinogen, mutagen or teratogen on any of the following lists:

- Latest edition of the Annual Report on Carcinogens, National Toxicology Program (NTP)

NTP Home Page:

<http://ntp-server.niehs.nih.gov/>

Known Human Carcinogens:

http://ntp-server.niehs.nih.gov/NewHomeRoc/Known_list.html

Reasonably Anticipated to be Human Carcinogens

http://ntp-server.niehs.nih.gov/NewHomeRoc/RAHC_list.html

- International Agency for Research on Cancer (IARC), Group 1, 2A or 2B
<http://193.51.164.11/default.html>
Go to: Complete list of agents, mixtures and exposures evaluated and their classification
- Occupational Safety and Health Administration (OSHA) regulated carcinogens
http://www.osha-slc.gov/OshStd_toc/OSHA_Std_toc.html

Additionally, no product shall contain more than trace amounts of paradichlorobenzene, 1, 4-dioxane, sodium hypochlorite, NTA or sodium EDTA.

Find sources of info for why these additional chemicals

5. Biodegradability

The product as a whole or individual ingredients must meet the Organization for Economic Cooperation and Development (OECD) definition of readily biodegradable. The State of Washington wishes to protect its numerous and varied water habitats which help support the local economy and quality of life for residents and, therefore, is concerned about the environmental fate of chemicals used in State operations.

To meet the definition of readily biodegradable, independent lab results must achieve the corresponding parameter on one of the following tests:

Test	Parameter
DOC Die-Away Test	60% Theoretical CO ₂ Evolution
MITI Test	60% Theoretical Oxygen Demand
Closed Bottle Test	60% Theoretical Oxygen Demand
CO ₂ Evolution Test	60% Theoretical CO ₂ Evolution
Modified OECD Screening Test	70% Dissolved Organic Carbon
Manimetric Respirometry Test	60% Theoretical Oxygen Demand

These values must be met within 10 days of reaching 10% and must also be met within 28 days of the beginning of the test. Testing is not required for any ingredient for which sufficient information exists concerning its biodegradability, either in peer-reviewed literature or databases or based on tests conducted according to standard procedures.

http://www.epa.gov/docs/OPPTS_Harmonized/835_Fate_Transport_and_Transformation_Test_Guidelines/Series/835-3110.htm

6. Ozone-Depleting Compounds

No products shall contain ozone-depleting chlorinated compounds, as specified by the Montreal Protocol.

1997 Update of the Handbook for the International Treaties for the Protection of the Ozone Layer
<http://unephq.unep.org/ozone/handbook-update.htm>

[chlorine bleach, sodium hypochlorite]

7. Volatile Organic Compounds (VOCs)

Because of the link between VOCs and air pollution, the State of Washington wishes to purchase products with the lowest VOC levels possible. No product shall contain VOCs in concentrations that exceed 10% of the weight of the product.

Examples of VOC's include: benzene; carbon tetrachloride, chlorobenzene, methyl ethyl ketone, trichloroethylene

8. Hazardous Waste Characteristics

No product, rendered unusable due to circumstances such as expired shelf life or as cleanup from a spill, shall be designated as a hazardous waste as defined in WAC 173-303-070 or as characterized in WAC 173-303-090.

- *The Washington State Dangerous Waste Regulations:*
<http://www.wa.gov/ecology/pubs/wac173303.pdf>

Ignitability: Flashpoint less than 140 deg. F

Corrosivity: pH less than or equal to 2, or greater than or equal to 12.5

Reactivity: Eight properties that make them likely to cause an explosive or sudden toxic danger

Toxicity: Fails the Toxic Characteristic Leaching Procedure

RANKED PRODUCT ATTRIBUTES

In this section, other environmental characteristics of a product will be judged on a relative ranking basis. Point scores will be assigned to each criterion that is reflective of the State of Washington's priorities for protecting human health and the environment. The higher the score in this section, the more favorable the evaluation. Please document your claims in this section – if no documentation is included for a particular section, the product will automatically be awarded the lowest score for that section.

9. Packaging

1. ***Does the vendor provide for the management of all empty product containers, i.e. via a demonstrable plan for re-using, re-filling or recycling containers?***

☐ Yes (4)

☐ No (0)

If Yes, describe: _____

2. ***Product comes in concentrate (defined as a liquid product that contains less than 20% water by weight) or bulk form***

☐ Yes (2)

☐ No (0)

3. ***If Yes, is dispensing equipment available that minimizes exposure to concentrate?***

☐ Yes (2)

☐ No (0)

If Yes, describe: _____

4. ***Is the product supplied in:***

☐ only an aerosol container (0)

☐ both aerosol and non-aerosol containers (1)

☐ only in non-aerosol containers (2)

5. ***The product container is made from the following percentage of post-consumer recycled content (defined as a finished material that would normally be discarded as a solid waste having completed its life cycle as a consumer item).***

☐ less than 35% (0)

☐ greater than or equal to 35% (2)

List and attach documentation source: _____

6. *If the container is plastic, is it a numbered type of plastic (i.e., #1 –7)?*

☐ Yes (2)

☐ No (0)

Highest score possible = 14

10. Acute Toxicity

“LD 50’s” and “LC 50’s” are the calculated doses or concentrations of a substance, which are expected to cause the death of 50% of an experimental animal population, either orally, through the skin or through the air. While such lethal dose values do not always translate neatly from animals to human systems, the State of Washington believes that they provide a sound means of comparing the immediate toxicity of products. The LD 50 and LC 50 tests are further defined in 29 CFR 1910.1200 Appendix A – Health Hazard Definitions. For all three categories below, if a mixture/product has not been tested as a whole to determine its hazards, the mixture shall be assumed to present the same health hazards as do the components which comprise one percent (by weight or volume) or greater of the mixture.

1. *Using the test result for oral route of exposure, this product’s LD 50 falls in which of the following categories:*

☐ > than 5,000 mg/kg (4) ☐ 500 – 5,000 mg/kg (2) ☐ < 500 mg/kg (0)

2. *Using the test result for skin route of exposure, this product’s LD 50 falls in which of the following categories:*

☐ > than 4,300 mg/kg (4) ☐ 430 – 4,300 mg/kg (2) ☐ < 430 mg/kg (0)

3. *Using the test result for inhalation route of exposure, this product’s LC 50 falls in which of the following categories:*

☐ > than 10,000 PPM (4) ☐ 1,000 – 10,000 PPM (2) ☐ < 1000 PPM (0)

Highest score possible = 12

11. Volatile Organic Compounds (VOCs)

1. *By weight, the product contains:*

☐ Zero – trace % VOCs (8) ☐ Trace – 5% VOCs (4) ☐ 5 – 10% VOCs (0)

Highest score possible = 8

12. Skin And Eye Irritation

The State of Washington is concerned about the exposure of State workers or contract staff to potentially irritating chemicals and wishes to minimize exposure to these in cleaning products.

1. *The product falls into the following “warning” category for eye irritation:*

- ☐ no warning label required (4)
- ☐ a CAUTION label required (2)
- ☐ a WARNING label required (0)

2. *The product falls into the following “warning” category for skin irritation:*

- ☐ no warning label required (4)
- ☐ a CAUTION label required (2)
- ☐ a WARNING label required (0)

3. *The product falls into the following “warning” category for lung irritation:*

- ☐ no warning label required (4)
- ☐ a CAUTION label required (2)
- ☐ a WARNING label required (0)

Highest score possible = 12

13. Rapidly Renewable Resource Based Products

The State of Washington wishes to reward products that can be made sustainably over time, for example, products which includes crop or plant derived ingredients instead of petroleum-based ingredients. The percentage given should be based on the carbon-based ingredients of the product.

Percentage of the product formulation that is derived from crop or plant matter or other rapidly renewable resource:

- ☐ 0 - 9% (0)
- ☐ 10 – 39% (3)
- ☐ > 40% (6)

Highest score possible = 6

14. Training Programs

The State of Washington believes that an effective training program is central to the success of using environmentally sustainable products. The State will look for vendors who can supply a quality training program and be accessible to trouble-shoot problem applications.

1) Does the vendor having a training plan for workers using its products?

☐ Yes (2) ☐ No (0) [If Yes, please attach this plan]

2) If Yes, does the training plan address training goals, training methods and the types of training proposed for custodians using these the vendor's cleaning products

☐ Yes (2) ☐ No (0)

3) Does the training plan list personnel who would be available to conduct on-site training and their expertise with the products and experience with the company?

☐ Yes (2) ☐ No (0)

Highest score possible = 6

15. Dyes And Fragrances

The State of Washington considers the addition of dyes and fragrances superfluous to product performance and recognizes the potential hazard associated with some of these additives.

1. Product contains synthetic dyes

☐ Yes (0) ☐ No (2)

2. Product contains synthetic fragrances

☐ Yes (0) ☐ No (4)

Highest score possible = 6

16. Phosphates

1. Phosphates cause eutrophication in our water bodies, therefore the State of Washington wishes to minimize the use of phosphates found in cleaning products. *Product contains phosphates and phosphonates, including sodium salts and potassium salts in quantities:*

☐ above 0.5% by weight of total phosphorus (0)

☐ below 0.5% by weight of total phosphorus (3)

Highest score possible = 3